

WHAT IS CLAIMED IS:

1. An integrated circuit, comprising:
 - a conductive layer;
 - a first die adhered to the conductive layer;
 - 5 a first adhesive layer on a top surface of the first die;
 - a plurality of spacers adhered to the first adhesive layer, the plurality of spacers arranged in a rectangular pattern on top of the first die;
 - 10 a second die having a second adhesive layer on a bottom surface of the second die, wherein the second adhesive layer is adhered to the plurality of spacers such that the plurality of spacers are between the first and second dies;
 - 15 a plurality of wires coupled to the conductive layer and to the first and second dies operable to conduct electricity between the conductive layer and the first and second dies; and
 - an encapsulating material operable to form the first and second dies, the spacers, the conductive layer, and
 - 20 the wires into a single package.

2. An integrated circuit, comprising:
a first die;
a second die;
a plurality of spacers between the first die and the
5 second die, wherein each of the spacers is attached to
the first die and the second die.

3. The integrated circuit of Claim 2, wherein the
spacers are adhered to the dies.

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4. The integrated circuit of Claim 2, wherein the
spacers are formed from silicon.

5. The integrated circuit of Claim 2, wherein the
15 spacers are formed from an adhesive material.

6. The integrated circuit of Claim 2, wherein:
there are exactly four spacers in the plurality of
spacers; and
20 the spacers are arranged in a rectangular pattern.

7. The integrated circuit of Claim 2, wherein:
the dies are formed from a first material; and
the spacers are formed from a second material
25 different from the first material.

8. The integrated circuit of Claim 2, wherein the
spacers are integral to the first die.

9. A method of forming an integrated circuit, comprising:

placing a first die;

adhering a plurality of spacers to the first die;

5 adhering a second die to the plurality of spacers
such that the spacers are between the first and second
dies.

10. The method of Claim 9, wherein:

10 the plurality of spacers are a first plurality of
spacers, and the first plurality of spacers is adhered to
a first side of the second die; and

the method further comprises:

15 adhering a second plurality of spacers on a
second side of the second die; and

adhering a third die to the second plurality of
spacers such that the second plurality of spacers is in
between the second and third dies.

20 11. The method of Claim 9, further comprising
enclosing the first and second dies and the spacers in an
encapsulating material.

12. The method of Claim 9, wherein:

25 the step of placing the first die comprises adhering
the first die to a conductive layer; and

the method further comprises:

coupling a plurality of wires to the conductive
layer; and

30 coupling each of the wires to at least one of
the dies.

13. The method of Claim 9, wherein:

there are exactly four spacers in the plurality of
spacers; and

the step of adhering the spacers comprises arranging
5 the spacers in a rectangular arrangement.

14. The method of Claim 9, wherein:

the dies are formed from a first material; and

the spacers are formed from a second material
10 different from the first material.

15. An integrated circuit made by a process, the process comprising:

placing a first die;

adhering a plurality of spacers to the first die;

5 adhering a second die to the plurality of spacers
such that the spacers are between the first and second
dies.

16. The integrated circuit of Claim 15, wherein:

10 the plurality of spacers are a first plurality of
spacers, and the first plurality of spacers is adhered to
a first side of the second die; and

the process further comprises:

15 adhering a second plurality of spacers on a
second side of the second die; and

adhering a third die to the second plurality of
spacers such that the second plurality of spacers is in
between the second and third dies.

20 17. The integrated circuit of Claim 15, wherein the
process further comprises enclosing the first and second
dies and the spacers in an encapsulating material.

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18. The integrated circuit of Claim 15, wherein:
the step of placing the first die comprises adhering
the first die to a conductive layer; and
the process further comprises:

5 coupling a plurality of wires to the conductive
layer; and

 coupling each of the wires to at least one of
the dies.

10 19. The integrated circuit of Claim 15, wherein:
there are exactly four spacers in the plurality of
spacers; and

 the step of adhering the spacers comprises arranging
the spacers in a rectangular arrangement.

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20. The integrated circuit of Claim 15, wherein:
the dies are formed from a first material; and
the spacers are formed from a second material
different from the first material.

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